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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/678,186      | 10/06/2003  | Dexter V. Bautista   | DIX009-162          | 2337             |

7590 07/14/2005

DIEDERIKS & WHITELAW, PLC  
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Woodbridge, VA 22192

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| EXAMINER |
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BEAUCHAINE, MARK J

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| ART UNIT | PAPER NUMBER |
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3653

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                |                                 |  |
|------------------------------|--------------------------------|---------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/678,186  | Applicant(s)<br>BAUTISTA ET AL. |  |
|                              | Examiner<br>Mark J. Beauchaine | Art Unit<br>3653                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10 and 16-21 is/are rejected.
- 7) ☒ Claim(s) 9, 11-15, 22 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/6/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Inventorship***

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 10 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent Number US 6,640,994 B2 by Chen in view of Patent Number 4,359,147 by Levasseur. The vending apparatus disclosed by the '994 patent incorporates machine body 10, magazines 17-21 and chute 35 that read on the Applicant's cabinet frame, stack areas and delivery chute, respectively. Although said

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'994 patent fails to specifically disclose a sound-type vend sensor, it does incorporate an optical detector that is located in the chute area (see Figure 3) and consists of a light curtain 37. Furthermore, said detector is configured to detect "a product 36 [that] has fallen through [said] light curtain 37" (column 4, lines 16 plus). Said '994 patent further discloses that "[e]xisting [vending] machines currently use ultrasonic devices [ ] for detecting the movement of a product the chute to the tray" (column 2, lines 3 plus).

The '147 patent teaches a vending control system that incorporates a sensor element 278 that "may include [ ] an accoustic (*sic*) detector means [that] is activated by a product being delivered" (column 7, lines 54 plus). Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the acoustic sensor arrangement of the '147 patent into the vending apparatus of the '994 patent to provide an effective product delivery detection means.

Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the '994 and '147 patents as applied to claim 16 above, and further in view of Patent Number 3,569,924 by Drake et al. Regarding claim 19, said '924 patent teaches an acoustic detector that incorporates cones 18 and 22 that read on the Applicant's cone members. Regarding claim 20, although the '147 patent fails to specifically disclose the step of sound amplification, such an enhancement of a sound detection beam is well known in the art. The '924 patent teaches an ultrasonic detection system that incorporates ultrasonic beam 20 that is amplified by amplifier 24.

***Allowable Subject Matter***

Claims 9, 11-15, 22 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Patent Number 4,869,392 by Moulding, Jr. et al because of its photodiode 52.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark J. Beauchaine whose telephone number is (571)272-6934. The examiner can normally be reached on 8:00AM through 5:00PM Mondays through Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald P. Walsh can be reached on (571)272-6944. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mjb

  
DONALD A. WALSH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600